

Test Information:

Serial No.:	2OXXN-1	Test Date:	2024/08/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Lingling Li	Test Result:	PASS

Environmental Conditions:

Temperature: (°C):	26.9	Relative Humidity: (%)	52	ATM Pressure: (kPa)	100.4
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	100147	2024/04/01	2025/03/31
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

20 dB Emission Bandwidth

BDR

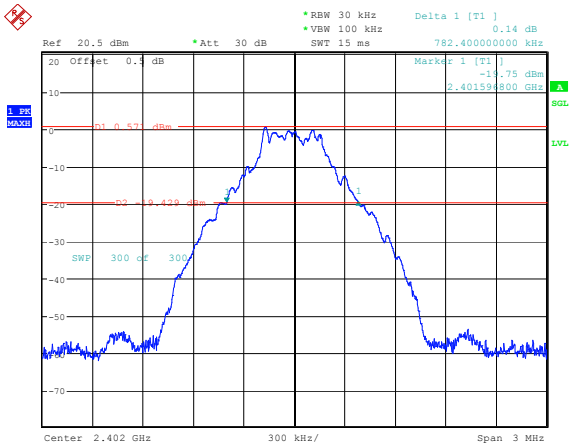
Mode	Value (MHz)
GFSK_Low	0.782
GFSK_Middle	0.782
GFSK_High	0.775

EDR

Mode	Value (MHz)
$\pi/4$ -DQPSK_Low	1.210
$\pi/4$ -DQPSK_Middle	1.214
$\pi/4$ -DQPSK_High	1.210
8DPSK_Low	1.224
8DPSK_Middle	1.222
8DPSK_High	1.219

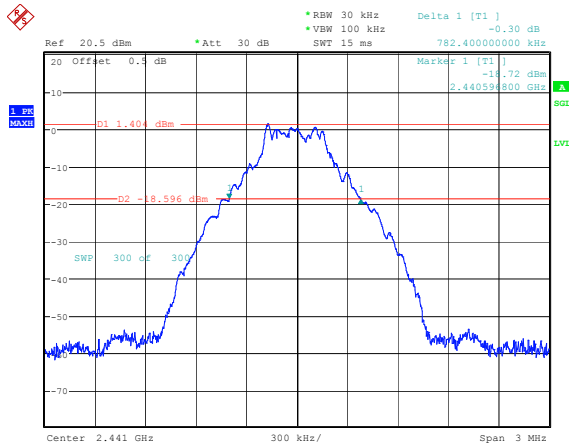
BDR

GFSK_Low 0.782MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:40:42

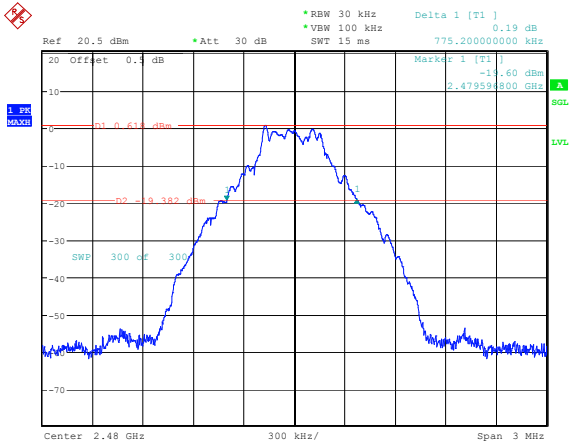
GFSK_Middle 0.782MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:46:52

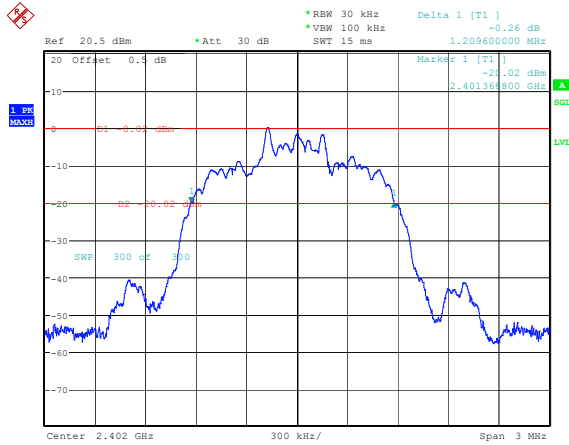
EDR

GFSK_High 0.775MHz



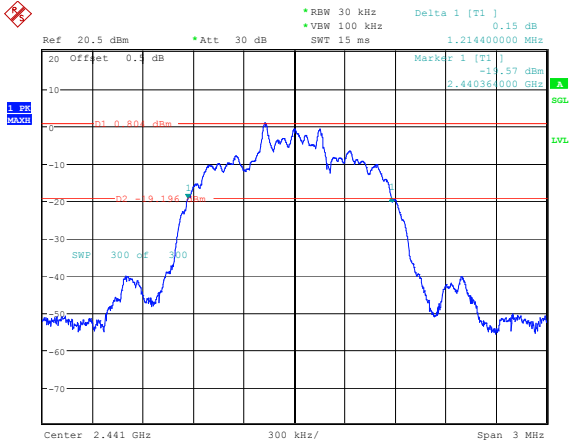
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:49:53

$\pi/4$ -DQPSK_Low 1.210MHz



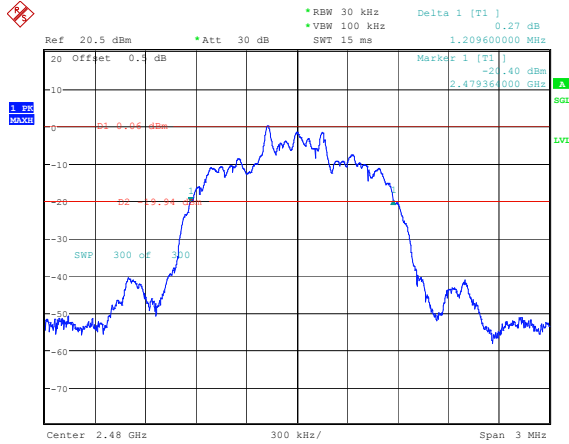
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:00:11

$\pi/4$ -DQPSK_Middle 1.214MHz



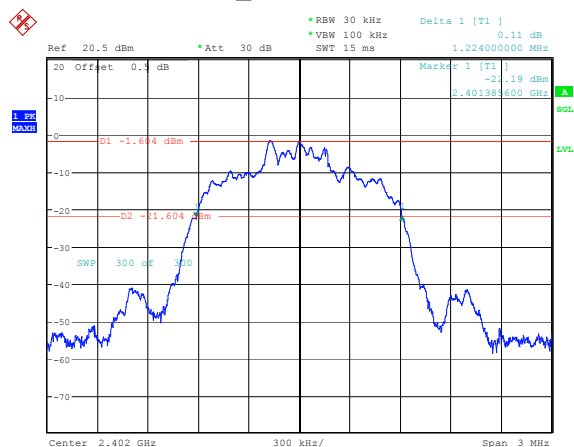
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:03:44

$\pi/4$ -DQPSK_High 1.210MHz



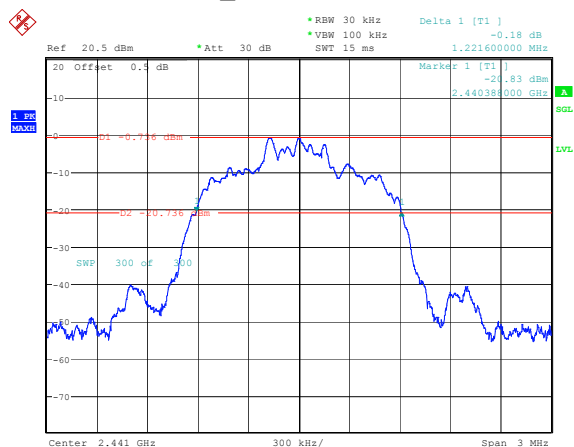
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:06:49

8DPSK_Low 1.224MHz



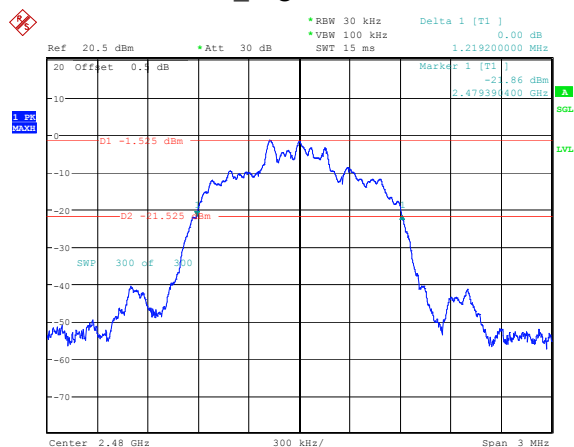
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:16:03

8DPSK_Middle 1.222MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:19:23

8DPSK_High 1.219MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:21:42

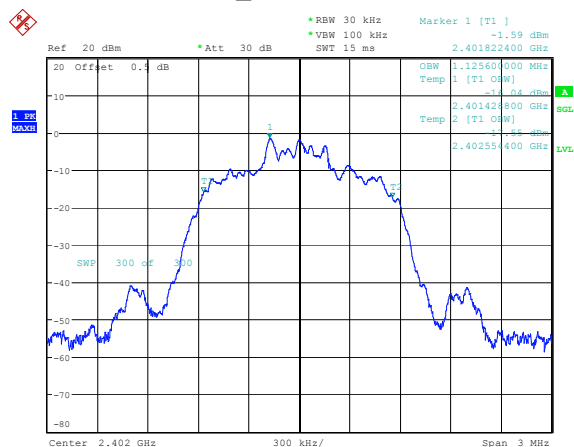
99% Occupied Bandwidth**BDR**

Mode	99% OBW (MHz)
GFSK_Low	0.725
GFSK_Middle	0.725
GFSK_High	0.725

EDR

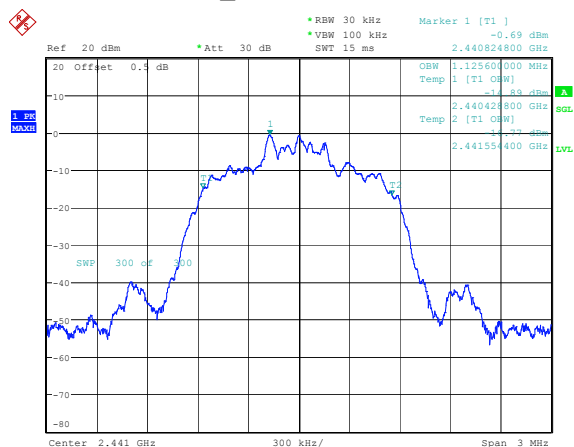
Mode	99% OBW (MHz)
$\pi/4$ -DQPSK_Low	1.130
$\pi/4$ -DQPSK_Middle	1.133
$\pi/4$ -DQPSK_High	1.133
8DPSK_Low	1.126
8DPSK_Middle	1.126
8DPSK_High	1.123

8DPSK_Low 1.126MHz



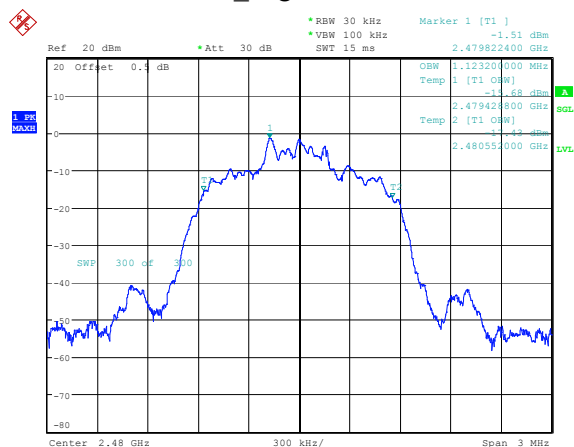
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:17:17

8DPSK_Middle 1.126MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:19:54

8DPSK_High 1.123MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:23:04

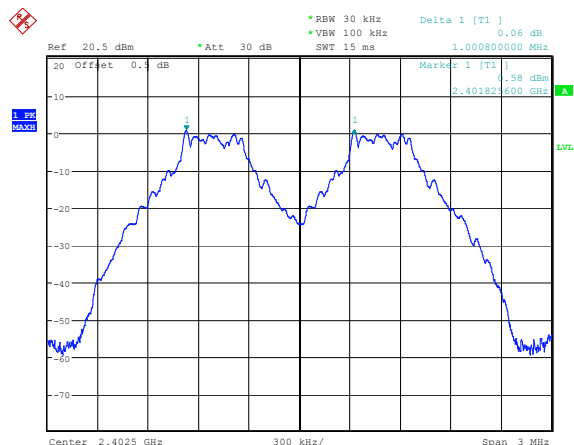
Channel Separation**BDR**

Mode	Value (MHz)	Limit (MHz)	Result
GFSK_Low	1.001	0.521	Pass
GFSK_Middle	1.001	0.521	Pass
GFSK_High	0.998	0.517	Pass

EDR

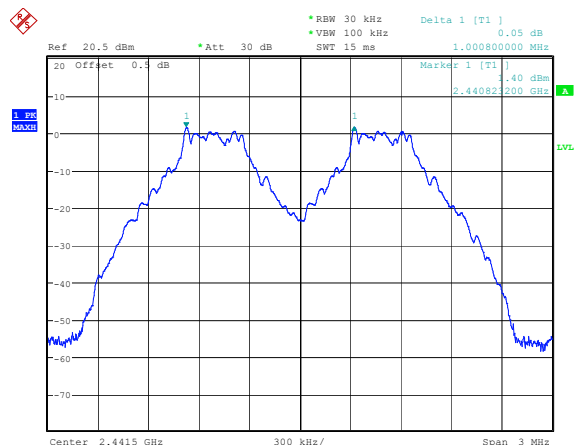
Mode	Value (MHz)	Limit (MHz)	Result
$\pi/4$ -DQPSK_Low	1.001	0.807	Pass
$\pi/4$ -DQPSK_Middle	1.003	0.809	Pass
$\pi/4$ -DQPSK_High	1.001	0.807	Pass
8DPSK_Low	1.001	0.816	Pass
8DPSK_Middle	1.001	0.815	Pass
8DPSK_High	1.001	0.813	Pass

GFSK Low 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:46:15

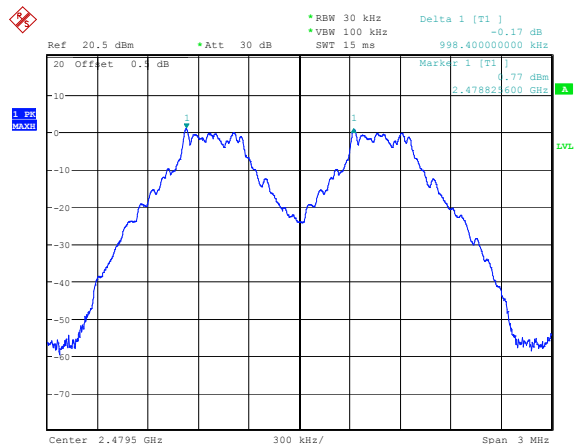
GFSK Middle 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:49:19

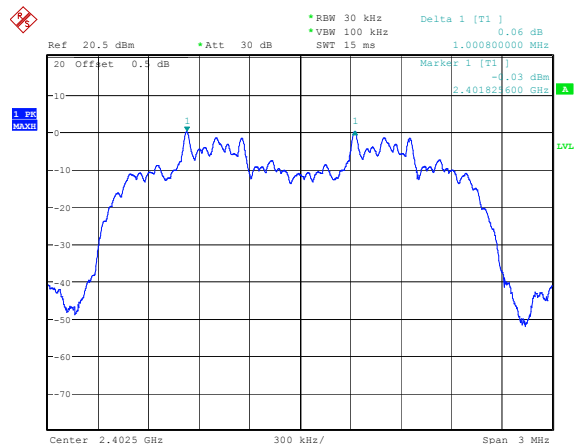
EDR

GFSK High 0.998MHz



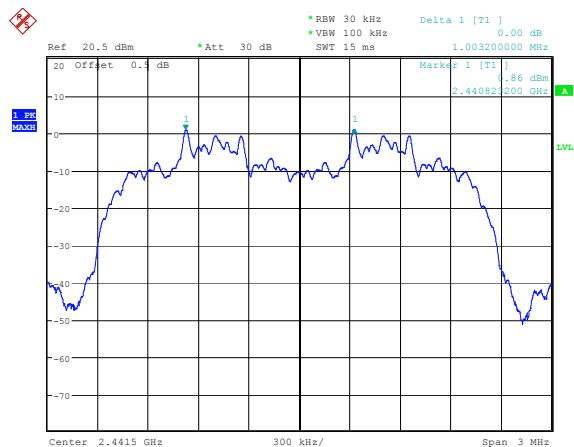
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:53:18

$\pi/4$ -DQPSK Low 1.001MHz



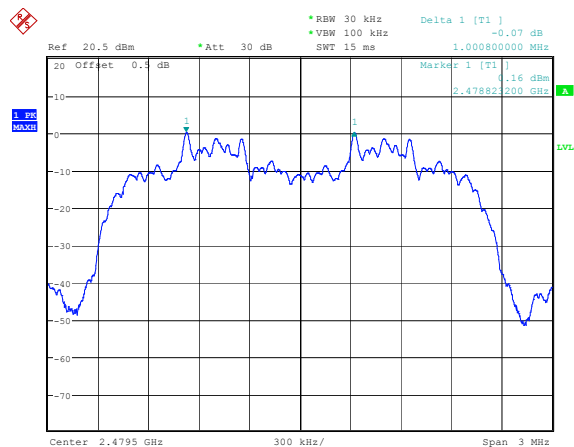
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:03:08

$\pi/4$ -DQPSK_Middle 1.003MHz



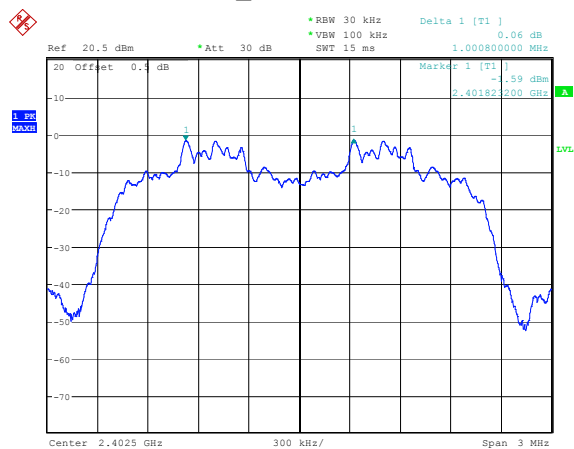
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:06:11

$\pi/4$ -DQPSK_High 1.001MHz



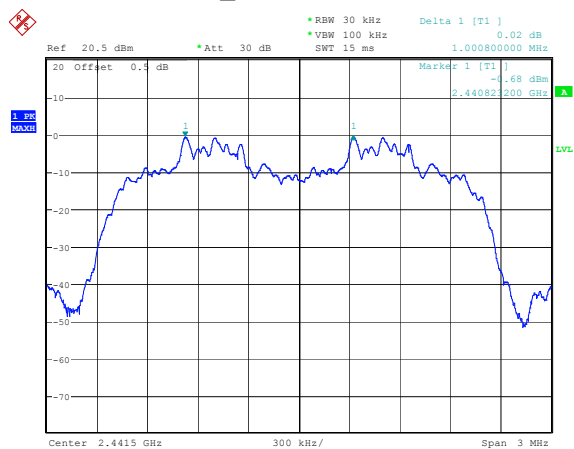
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:11:15

8DPSK_Low 1.001MHz



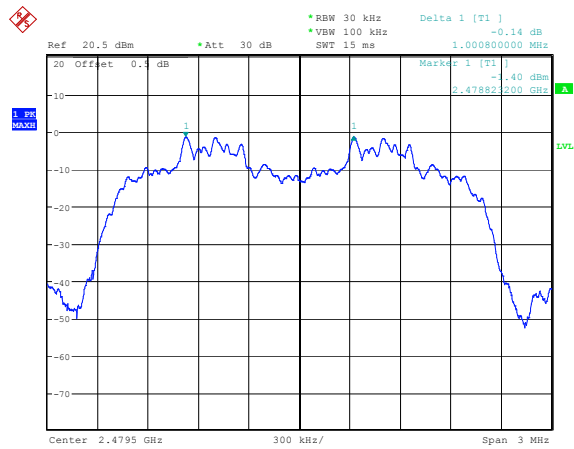
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:18:42

8DPSK_Middle 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:21:08

8DPSK_High 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:24:46

Number of Hopping Frequency

BDR

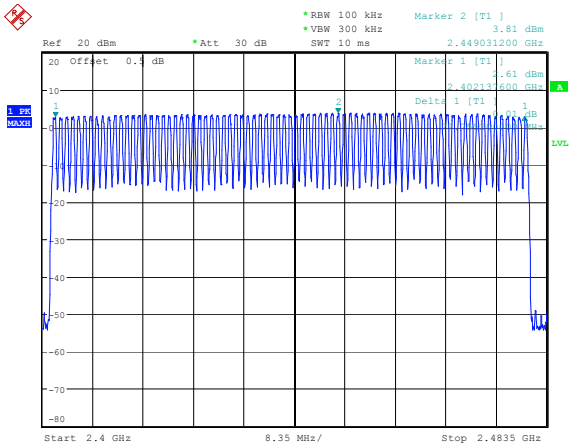
Mode	Value	Limit	Result
GFSK_Hopping	79	15	Pass

EDR

Mode	Value	Limit	Result
$\pi/4$ -DQPSK_Hopping	79	15	Pass
8DPSK_Hopping	79	15	Pass

BDR

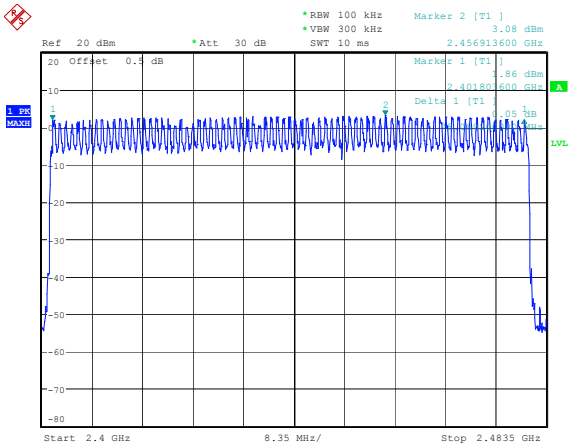
GFSK_Hopping 79



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:49:58

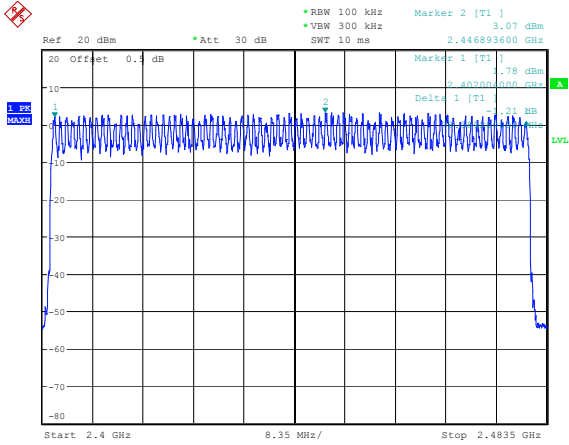
EDR

$\pi/4$ -DQPSK_Hopping 79



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:56:45

8DPSK_Hopping 79



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:15:14

Time of Occupancy (dwell time)**BDR**

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
GFSK_Hopping_DH1	0.395	0.126	0.400	Pass
GFSK_Hopping_DH3	1.656	0.265	0.400	Pass
GFSK_Hopping_DH5	2.912	0.311	0.400	Pass

EDR

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
$\pi/4$ -DQPSK_Hopping_2DH1	0.402	0.129	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH3	1.658	0.265	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH5	2.912	0.311	0.400	Pass
8DPSK_Hopping_3DH1	0.402	0.129	0.400	Pass
8DPSK_Hopping_3DH3	1.658	0.265	0.400	Pass
8DPSK_Hopping_3DH5	2.916	0.311	0.400	Pass

Note:

DH1: Dwell time = Pulse width (ms) $\times$ (1600/2/79) $\times$ 31.6 s

DH3: Dwell time = Pulse width (ms) $\times$ (1600/4/79) $\times$ 31.6 s

DH5: Dwell time = Pulse width (ms) $\times$ (1600/6/79) $\times$ 31.6 s

2DH1: Dwell time = Pulse width (ms) $\times$ (1600/2/79) $\times$ 31.6 s

2DH3: Dwell time = Pulse width (ms) $\times$ (1600/4/79) $\times$ 31.6 s

2DH5: Dwell time = Pulse width (ms) $\times$ (1600/6/79) $\times$ 31.6 s

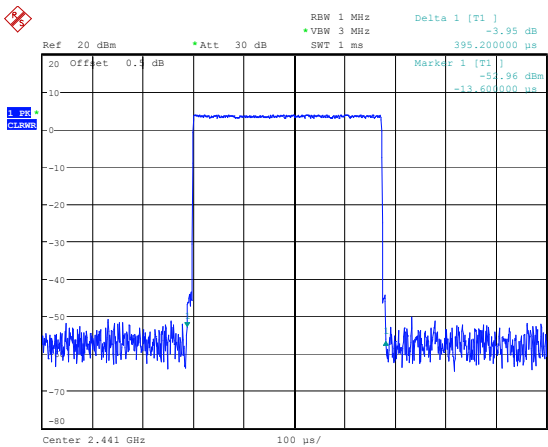
3DH1: Dwell time = Pulse width (ms) $\times$ (1600/2/79) $\times$ 31.6 s

3DH3: Dwell time = Pulse width (ms) $\times$ (1600/4/79) $\times$ 31.6 s

3DH5: Dwell time = Pulse width (ms) $\times$ (1600/6/79) $\times$ 31.6 s

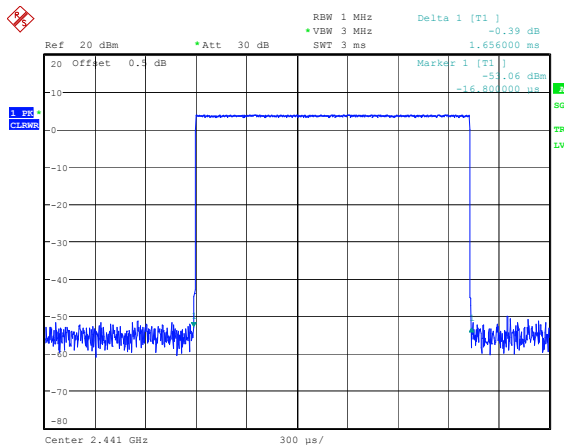
BDR

GFSK_Hopping_DH1 0.395ms



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:29:31

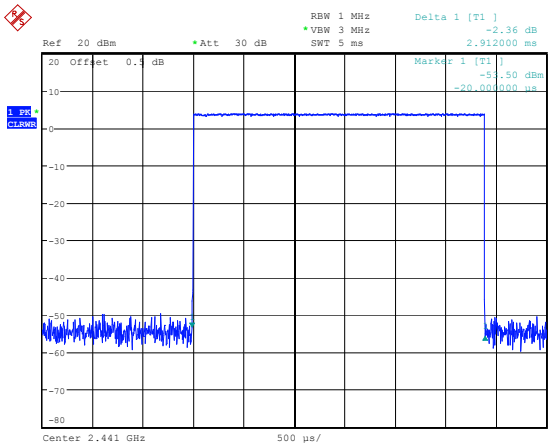
GFSK_Hopping_DH3 1.656ms



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:30:22

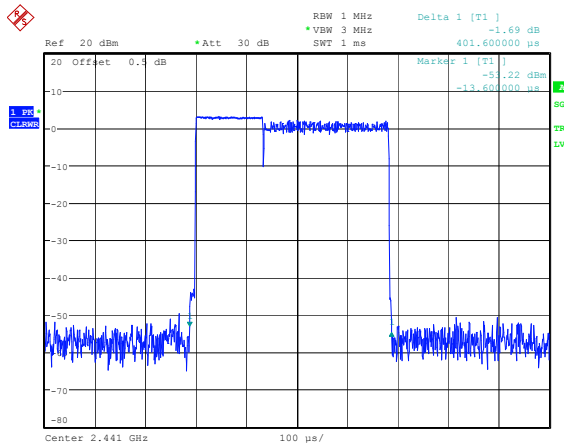
EDR

GFSK_Hopping_DH5 2.912ms



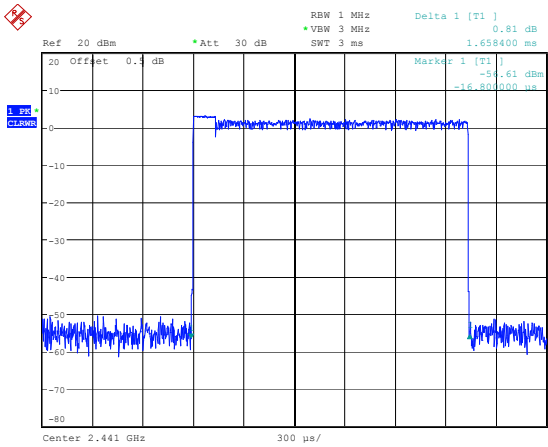
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:31:07

$\pi/4$ -DQPSK_Hopping_2DH1 0.402ms



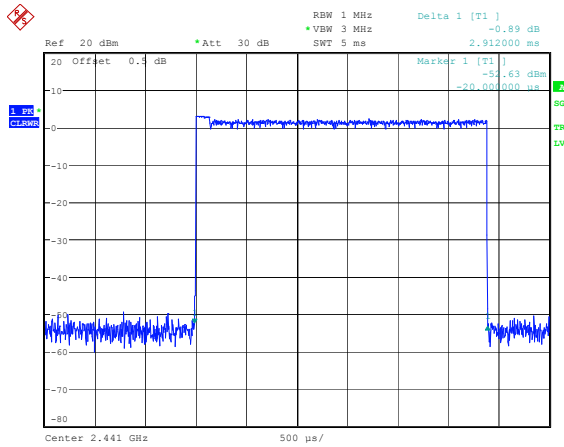
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:31:46

$\pi/4$ -DQPSK_Hopping_2DH3 1.658ms



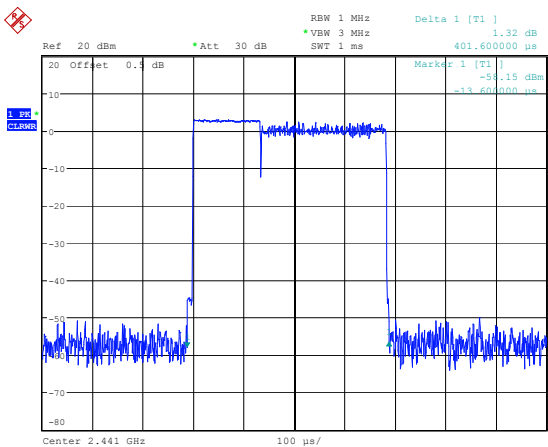
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:32:35

$\pi/4$ -DQPSK_Hopping_2DH5 2.912ms



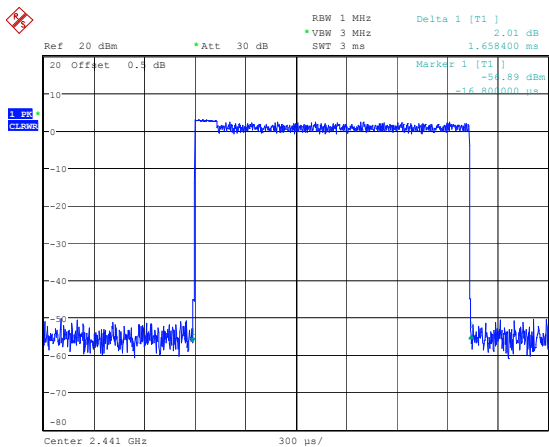
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:34:21

8DPSK_Hopping_3DH1 0.402ms



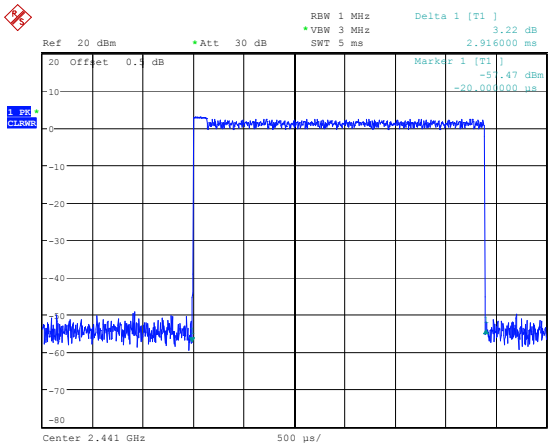
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:35:03

8DPSK_Hopping_3DH3 1.658ms



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:35:47

8DPSK_Hopping_3DH5 2.916ms



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:36:35

Maximum Conducted Output Power**BDR**

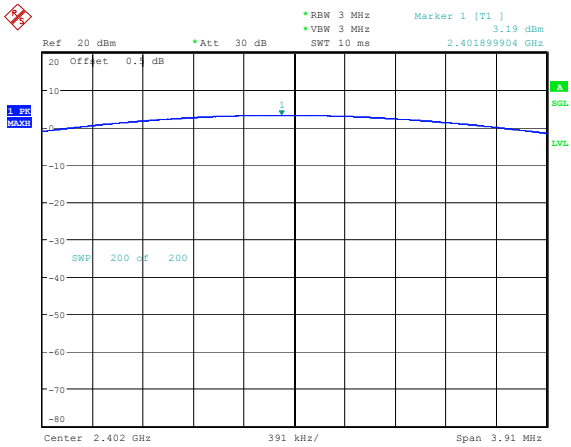
Mode	Value (dBm)	Limit (dBm)	Result
GFSK_Low	3.19	21.00	Pass
GFSK_Middle	3.98	21.00	Pass
GFSK_High	3.17	21.00	Pass

EDR

Mode	Value (dBm)	Limit (dBm)	Result
$\pi/4$ -DQPSK_Low	2.29	21.00	Pass
$\pi/4$ -DQPSK_Middle	3.15	21.00	Pass
$\pi/4$ -DQPSK_High	2.34	21.00	Pass
8DPSK_Low	2.09	21.00	Pass
8DPSK_Middle	2.98	21.00	Pass
8DPSK_High	2.12	21.00	Pass

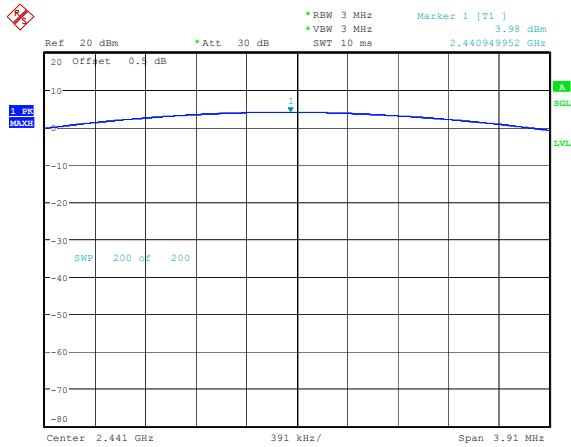
BDR

GFSK_Low 3.19dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:44:39

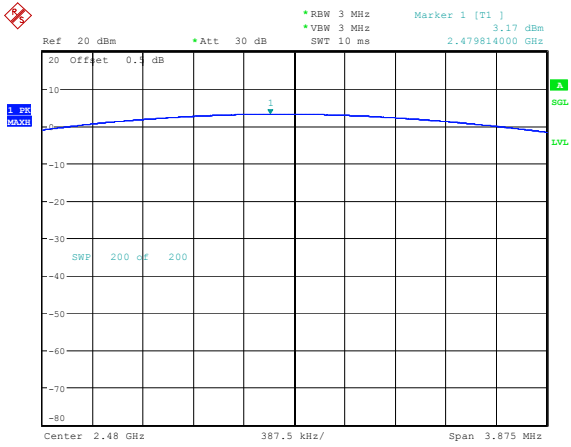
GFSK_Middle 3.98dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:47:42

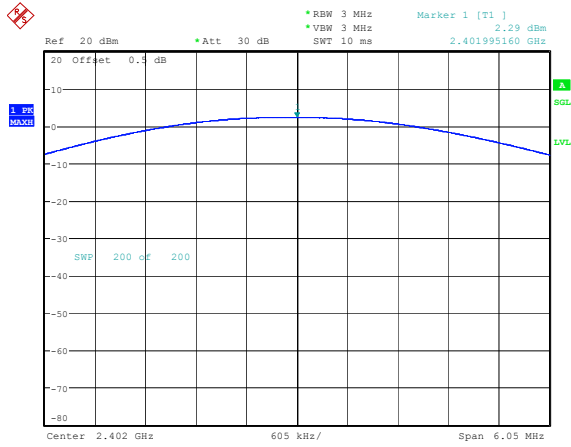
EDR

GFSK_High 3.17dBm



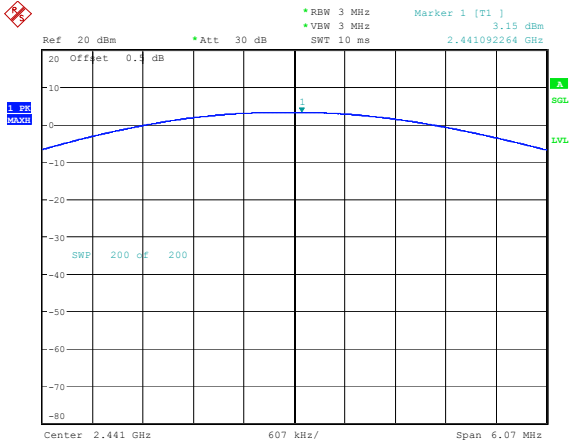
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:51:35

$\pi/4$ -DQPSK_Low 2.29dBm



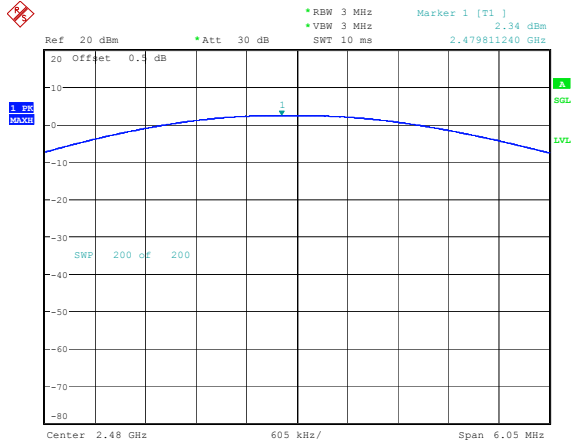
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:01:49

$\pi/4$ -DQPSK_Middle 3.15dBm



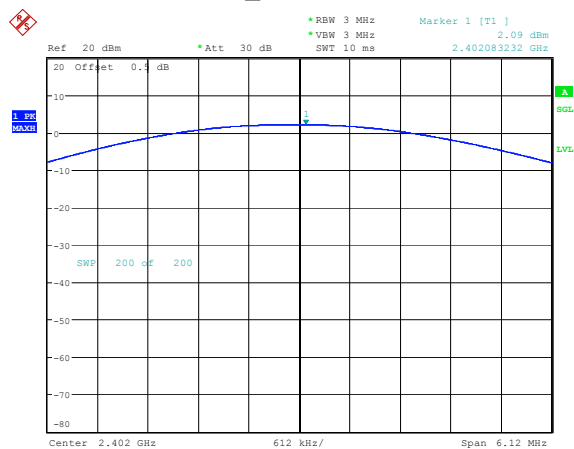
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:04:50

$\pi/4$ -DQPSK_High 2.34dBm



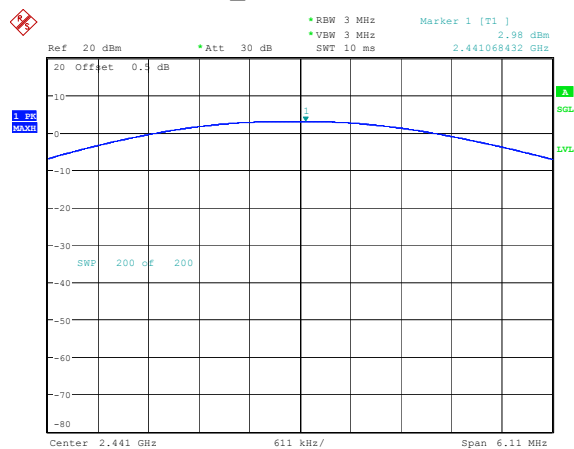
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:09:37

8DPSK_Low 2.09dBm



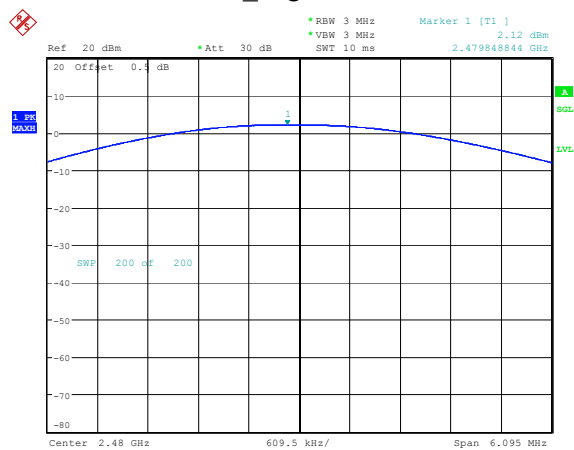
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:17:39

8DPSK_Middle 2.98dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:20:14

8DPSK_High 2.12dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:23:25

100 kHz Bandwidth of Frequency Band Edge**BDR**

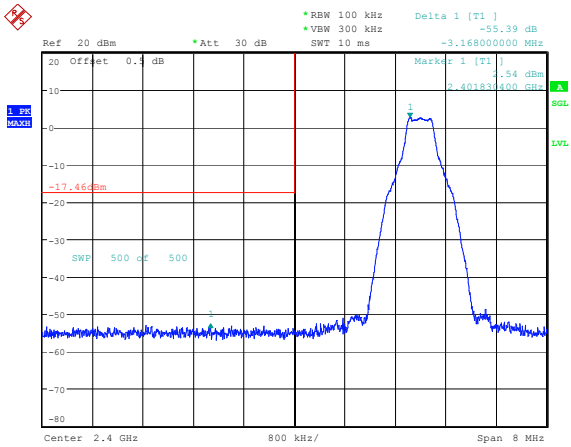
Mode	Value (dB)	Limit (dB)	Result
GFSK_Low	55.39	20.00	Pass
GFSK_High	54.61	20.00	Pass
GFSK_Hopping_Lower	54.49	20.00	Pass
GFSK_Hopping_Upper	55.54	20.00	Pass

EDR

Mode	Value (dB)	Limit (dB)	Result
$\pi/4$ -DQPSK_Low	54.56	20.00	Pass
$\pi/4$ -DQPSK_High	54.48	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Lower	54.36	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Upper	53.06	20.00	Pass
8DPSK_Low	54.71	20.00	Pass
8DPSK_High	54.60	20.00	Pass
8DPSK_Hopping_Lower	46.71	20.00	Pass
8DPSK_Hopping_Upper	54.11	20.00	Pass

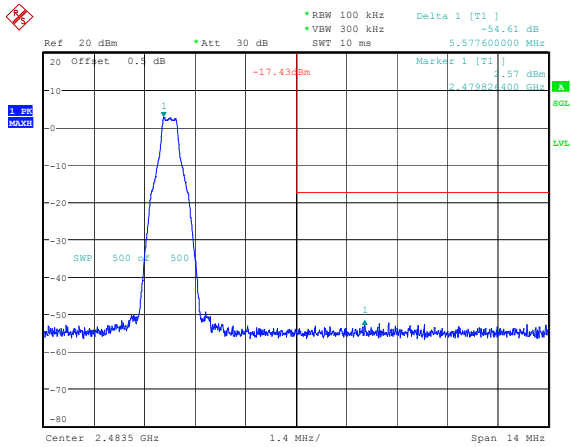
BDR

GFSK_Low 55.39dB



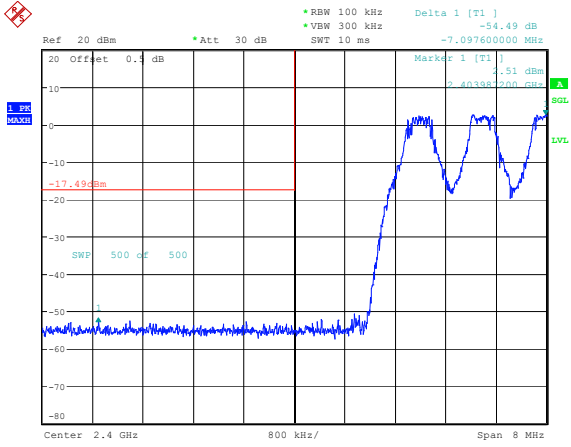
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:41:25

GFSK_High 54.61dB



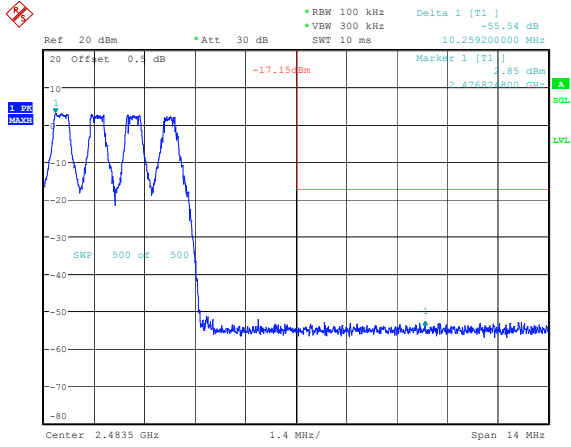
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:50:43

GFSK_Hopping_Lower 54.49dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:57:17

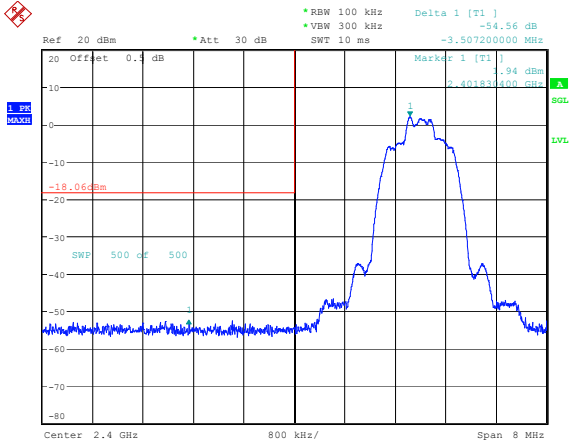
GFSK_Hopping_Upper 55.54dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 13:59:28

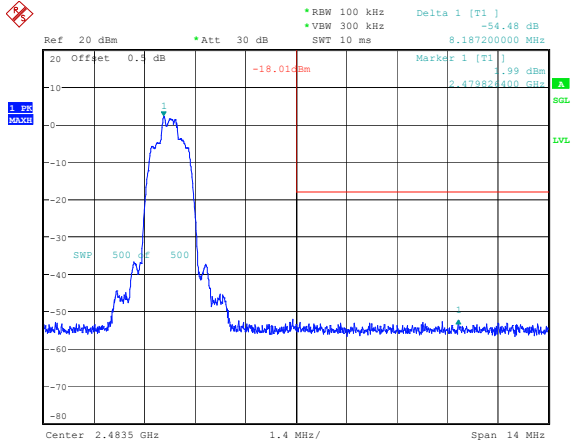
EDR

$\pi/4$ -DQPSK_Low 54.56dB



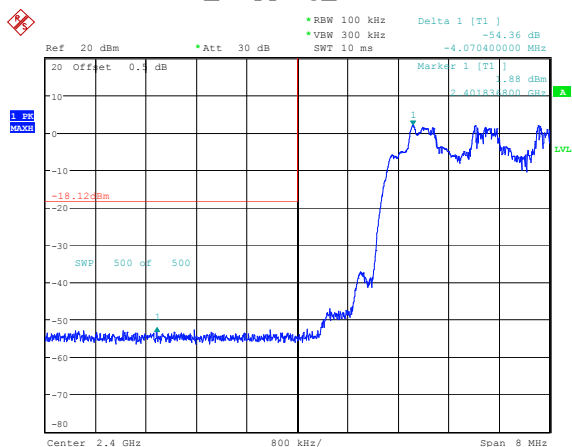
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:00:56

$\pi/4$ -DQPSK_High 54.48dB



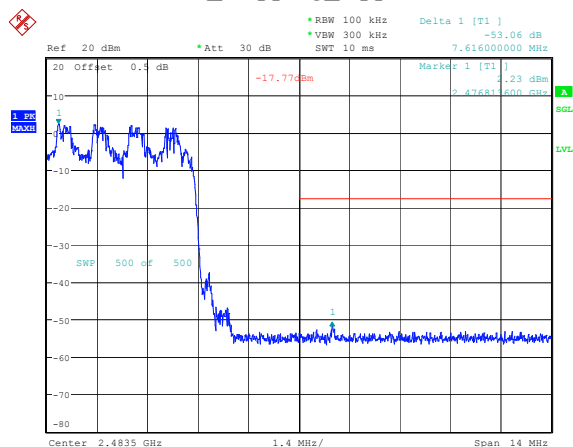
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:07:41

$\pi/4$ -DQPSK_Hopping_Lower 54.36dB



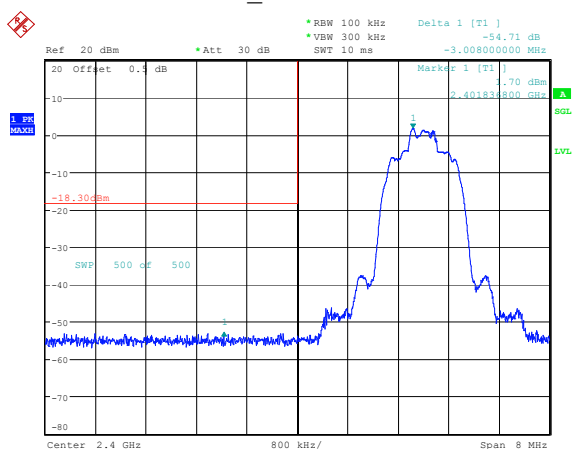
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:13:58

$\pi/4$ -DQPSK_Hopping_Upper 53.06dB



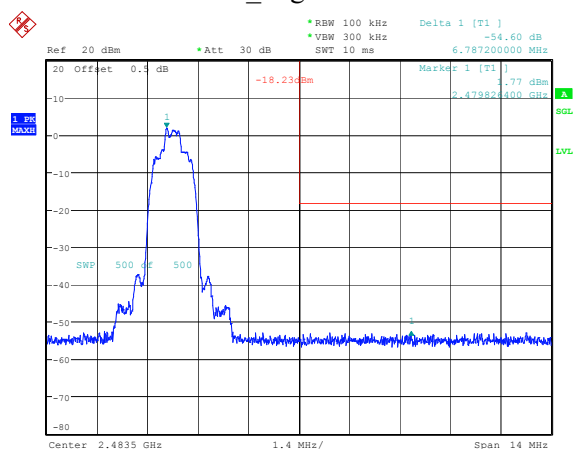
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:15:17

8DPSK_Low 54.71dB



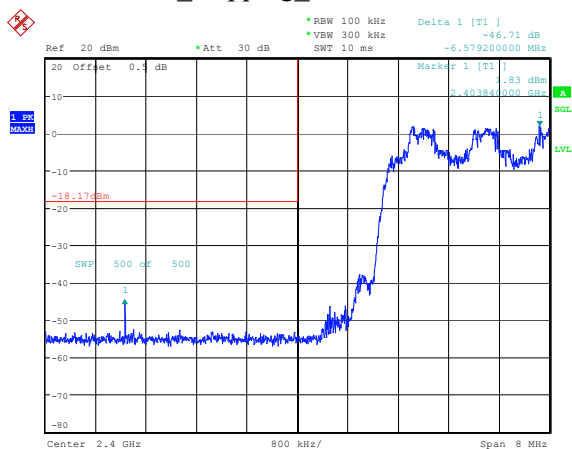
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:16:46

8DPSK_High 54.60dB



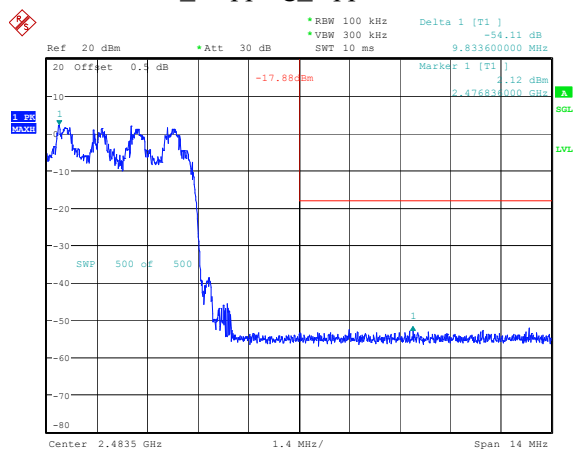
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:22:33

8DPSK_Hopping_Lower 46.71dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:25:43

8DPSK_Hopping_Upper 54.11dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 14:26:40